

### Secularization in Eastern and Western Europe: results from the ISSP 1991 Survey on Religion in 10 West and East European nations

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Results from the ISSP 1991 Survey on Religion  
in 10 West and East European Nations**

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**Secularization in Eastern and Western Europe**

**Results from the ISSP 1991 Survey**

**on Religion in 10 West and East European Nations**

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This report was prepared while the first author was a visiting professor at the Center for Methodology and Survey Research (ZUMA) in Mannheim/Germany and at the University of Marburg 1995/96. The authors appreciate the hospitality of ZUMA and the help of Professor Kiely S.J. (Pontificia Universita Gregoriana / Roma).

## 1. INTRODUCTION

There are many hints that one of the profoundest and possibly longest lasting effects of communist rule in Eastern Europe and Russia is the repression of religious life and the forced secularization of society.

For the first time since the early middle ages, now there are societies in Europe where the majority of citizens have no personal connection to the Christian religion, in many cases even no personal experience of religious rites, services, feasts.

If we look at single nations, however, the picture is far from uniform. In some nations, which were predominantly Catholic before the communist era, the Catholic faith today seems to be still strongly embedded, (e.g. Poland, Slovenia) while in other such countries this seems not to be the case any more (Czechia, Slovakia). The context of majority religion seems to play an important role, too: the Catholic minority in East Germany and the Protestant minority in Hungary have taken different courses in time which to some extent can be ascribed to the majority denomination (Protestant in East Germany, Catholic in Hungary).

In assessing the effects of forced secularization under communist rule, on the other hand, we also have to take into account the effects of secularization in Western Europe where religion and the churches were not repressed, in fact protected in various ways by the state, but where the churches also emptied, in some places even more so than in the East, if we compare, say the Nordic countries with Poland. We must assume that, to a sizable degree, secularization in Eastern Europe would have taken place also under democratic rule.

Therefore, we should not only compare past and present in Eastern Europe, but also compare past and present in Eastern and Western Europe - this even more so because, due to a lack of survey data, our knowledge about the past in all European countries before the onset of communist rule in the East after W.W. II is limited.

The data set used in our evaluation is the largest international comparative data set on religious issues ever collected, the ISSP - International Social Survey Program - of 1991, in which 16 nations from Europe, Asia, North America, and Oceania participated. The ISSP, in addition to standard demographic and socio-economic variables administers a common module of issue specific items to a national random sample of at least 1'000 respondents.

In 1989, for example the issue was "work orientations" in 1991, it was "religion". A detailed study description can be found in Greeley (1993a, 1993c) and the documentation, which

together with the data set is available on CD-ROM from ISSP's data archive, the Zentralarchiv für Sozialwissenschaften at the University of Cologne/Germany. For a general description of the ISSP, see Beckmann & Mohler 1991)

Besides the preliminary results by Greeley (1993a), the evaluation of the data on Britain, Ireland and the USA by Greeley (1992), and likewise by Greeley (1993b), authors like Fritsch (1992) and Terwey (1993) published, by using ISSP data, results on inner-German comparisons, i.e. West Germany with the new federal 'länder' of the former German Democratic Republic. Heath (1993) was particularly concerned about the relationship between religion and politics. Frank's (1995) article, in so far as he used data from the ISSP set, specialized on Russia's "Re-Christianization" with comparative figures of the Netherlands, Slovenia and the former German Democratic Republic.

A continental European comparison on the secularization process of East and West, however, has never been made. This article will concentrate on this topic.

Among the continental European countries, we focus on those which have either a predominantly Catholic or Protestant religious past. Thus, Orthodoxy as well as Anglicanism made Russia and the UK, respectively, ineligible due to a lack of a same-denominational counterpart in the West and in the East. The remaining nations in the data set were Austria, West-Germany, Ireland, Italy, the Netherlands, Norway for the West, East Germany; Hungary, Poland, Slovenia, for the East, with a total of 12.503 respondents between 20 and 94 years of age.

Basically, we will be investigating the following questions:

1. Has the repression of religious life under communist rule in Eastern Europe led to a broader secularization in religious beliefs, religious practices and ethical issues where all Christian denominations have clear and unambiguous teachings than in comparable societies in Western Europe?
2. Were Protestant or Catholic societies/contents more resilient against Western type or Eastern type of secularization?

3. How differ active church members in Eastern and Western societies in their religious beliefs, religious practices and ethical orientations?

4. Does the concept "non-believer" necessarily mean "atheist" in a scientific Marxist terminology or does this concept include possible latent religious attachments which might likewise substantially modify the concept of secularization? For our everyday experience, self-identification as non-believer, as atheist, as a non-member of any church or other religious community does not preclude parareligious beliefs or practices, like belief in faith healers, horoscopes, good luck charms, fortune tellers, miracles etc. In fact, we speculate that among non-believers such parareligious beliefs (and practices) may be more frequent than among members of a Christian church - since Christian as well as Jewish and Moslem doctrine explicitly excludes such kind of beliefs. We want to test this hypothesis.

Context variables concerning the specific religious histories of the societies as well as individual characteristics known to have stable relations with religious beliefs, religious practices and ethnical issues will be considered as intervening variables.

## 2. METHODS

### 2.1 DATA

ISSP 1991 on Religion, data of respondents from Austria, West-Germany, Ireland, Italy, the Netherlands, Norway for the West, East Germany; Hungary, Poland, Slovenia, for the East, with a total of 12.503 respondents between 20 and 94 years of age.

### 2.2 VARIABLES

#### 1.) East/West

2.) **Church membership: Protestants, Catholics, no denomination and other denominations.** The last characteristic was too rare to be included in the analysis, and, consequently, such cases were not investigated further.

3.) The **percentages of Catholics, Protestants and persons without denomination in the country of residence** as religious context variables. Since these three categories add up to almost 100 percent, percentage of Protestants and the percentage without denomination (which showed no correlation, while the correlations of the percentage of Catholics with the other two categories were  $-.625$  and  $-.786$ , respectively, with  $p=.0001$ ) were selected in order to characterize the macrosociological religious background.

4.) Individual characteristics: **sex, age, and a college degree or present status as college student** as a rough measure of educational attainment.

Important, as the level of education is for any sociological analysis, yet systems of education vary so much among Western or Eastern nations (and even more so between West and East) that graduation from a third-level institution or present enrollment in such an institution, probably is the most robust single measure of individual educational attainment across nations.

Other structural measures - community size, rural/urban, employment in primary/secondary/tertiary sector of the economy, objective or subjective class membership etc. - were not taken into account since the measurement category systems are too heterogeneous for use across all countries in the analysis.

Family status and family size as well as household size showed no consistent effect, and, therefore were also dropped from further analysis.

5.) Religious belief contents were measured by two items:

a) "**BELIEF**": "Which statement comes closest to expressing what you believe about God?" with the values "I don't believe."; "I don't know whether he exists."; "There is no personal God."; "Sometimes I believe."; "I have doubts."; and "I know that God really exists.".

b) Item "**CLOSENESS**": "How close do you feel to God, most of the time?" with the values "I don't believe."; "Not close at all."; "Not very close."; "Somewhat close."; and "Extremely close.".

After proper pretesting, both items can be considered as measuring on an ordinal scale.

6.) Religious practices were measured by four items

a) **Present Frequency of Service Attendance:**

"How often do you attend religious services?"

b) **Present Frequency of Praying:**

"How often do you pray?"

c) **Present Frequency of Church Activities Attendance other than services**

"How often do you take part in church activities other than services?"

Each of these three items were measured with 11 values from "never"; "less than once a year"; to "several times a day";

d) **Past Frequency of Service Attendance:**

"How often did you attend religious services, when you were 11-12 years old?"

This item was measured with 9 values, ranking from "never" to "several times a week".

7.) In broad terms, one item asked for a statement about the respondents' religious biography with the values "I never believed."; "I don't believe, but used to."; "I believe, but didn't." and "I always believed.". This variable cannot be regarded as ordinally scaled, but we can extract two binary variables from it, one, whether the respondent has experienced a **LOSS** (or a **GAIN**) of a religious commitment which was present (was not present) in the respondent's past.

Also, if a respondent went to church as a youngster (11-12 years of age) more frequently than at the time of the interview the **TREND** was identified as going downwards; if both frequencies were about equal, the trend was identified as stable; and if the respondent went to church earlier in life less frequently than when interviewed, the trend was identified as going upwards.

8.) Attitudes to ethical issues were recorded in three areas: Sexuality, abortion, and duties as taxpayer and possible recipient of government welfare benefits.



a) **Sexual attitudes** were measured with the items

- **premarital sex**: "Do you think, it is wrong or not wrong if a man and a woman have sexual relations before marriage?";

- **extramarital sex** : "What about a married person having sexual relations with someone else than his or her husband or wife, is it wrong or not wrong?";

- **homosexuality** : "And what about sexual relations between two adults of the same sex, is it wrong or not wrong?";

all with the values "Always wrong"; "Almost always wrong"; "Wrong only sometimes"; and "Not wrong at all".

b) **Attitudes towards abortion** were measured by two items

- **abortion for biological reasons** : "Do you personally think it is wrong or not wrong for a woman to obtain a legal abortion, if there is a strong chance of a serious defect in the baby?"; and

- **abortion for social reasons** : "Do you personally think it is wrong or not wrong for a woman to obtain a legal abortion, if the family has a very low income and cannot afford any more children?"

both with the values "Always wrong"; "Almost always wrong"; "Wrong only sometimes"; and "Not wrong at all".

c) Attitudes towards duties as taxpayer and recipient of government welfare benefits were measured by two items:

"Do you feel it is wrong or not wrong if a **taxpayer does not report all of his income** in order to pay less income tax?"; and

"Do you feel it is wrong or not wrong if a person **gives the government incorrect information** about himself to get government benefits that he is not entitled to?"

with the same values as in b).

9.) Parareligious beliefs were recorded with the following items:

"Do you believe in **religious miracles**?" with the values "Yes, definitely"; "Yes, probably"; "No, probably not"; "No, definitely not";

"... whether you think each statement is true or false:

- Some **faith healers** really do have God-given healing powers";

- **Good luck charms** sometimes do bring good luck";

- Some **fortune tellers** really can foresee the future";

- A person's star sign at birth, or **horoscope**, can affect the course of their future";  
each with the values "Definitely true"; "Probably true"; "Probably not true"; "Definitely not true";

While the item **religious miracles** has been applied in all countries of the study, the items **Good luck charms**, **fortune tellers**, **faith healers**, and **horoscope** are available for the two parts of Germany, Ireland, Austria and Slovenia only.

## 2.3 ANALYSIS

Independent variables (1.) to (4.) were checked for rank-correlation in order to detect sampling biases or multicollinearities. Distributions of all dependent variables (5.) to (8.) by West-East-grouping, were cross-tabulated and tested for differences in central tendencies; usually a Mann-Whitney Test was applied.

Multivariate OLS linear regressions were used to show the strength and direction of the effects of the independent variables on dependent variables or on each other. Given the sample size and the number of levels in ordinally-scaled items, application of this model seems acceptable. Where it was appropriate, multivariate logistic regression was used. Also, to see, if the same relations between individual and context factors and the dependent variables existed in West and in East, the multivariate analyses were performed separately for the two regions. Further, to check differences between West and East for active churchmembers, all multivariate analyses were performed for respondents who reported membership in the Catholic or Protestant churches and service-attendance of at least once a month.

### 3. RESULTS

First, correlations between independent variables had to be checked. Sex and age were equally distributed over countries, as was to be expected. In the West, there were slightly more respondents (16 %) with a college degree or current enrollment in a college than in the East (12 %). There were 33 % Protestants in the West and 12 % in the East, 48 % Catholics in the West and 62 % in the East. Still, in all countries included in the study, the majority of the population formally belongs to a Christian denomination, except East Germany (35 %) and Netherlands (41 %). Percentages of Catholics (and Protestants) varied widely among nations, between 1 % and 95 % (0 % and 89 %); but so does the regional distribution within countries.

#### 3.1 Bivariate Analyses

Between East and West, as anticipated, there are sizable differences in all aspects of religious life.

Easterners more frequently identify themselves as atheists and more frequently express doubts about the existence of a personal God or feel less frequently close to God. (see Table 1).

Table 1: Percentages of respondents

BELIEF	West	East
I don't believe in God	8.5	22.7
I don't know whether he exists	9.9	10.8
There is no personal God	18.1	14.5
Sometimes I believe	9.0	9.6
I have doubts	21.4	14.0
I know that God really exists and have no doubts about it	33.0	28.4

n = 12,530

West/East Difference  $p < .0001$

# Percentages of respondents

CLOSENESS	West	East
I don't believe in God	11.7	29.9
I do not feel close at all	10.0	9.0
I do not feel very close	22.1	20.3
I feel somewhat close	42.0	28.4
I feel extremely close	14.2	12.4

n = 11,370

West/East Difference  $p < .0001$

Easterners say more often that they never go to religious services. Those who go sometimes, do it less frequently than Westerners. The same pattern holds for the frequency of praying and for the frequency of attendance at church activities other than services (see Table 2).

The distribution of types of religious biographies not only is parallel to the figures displayed in Tables 1 and 2, but also gives hints that the process of secularization started earlier and has already gone further in the East (see Table 3a and Table 3b).

The figures in Table 3a and 3b do not indicate that a recent dramatic development has caused the East/West differences; they rather indicate a slow and gradual process on both sides which, however, has already gone further in the East. The relatively high proportion of respondents in the East who go to church more often now than when they were children can be explained by the hypothesis that such respondents, with unshaken faith, now feel less inhibited about going to church as often as they like.

Table 2: Percentages of respondents

Religious Observance	Service Attendance		Praying		Other Church Activities	
	West	East	West	East	West	East
Never	27.9	35.0	27.3	38.3	54.6	66.1
Less than once a year	9.9	13.9	4.5	4.1	9.0	8.0
About once or twice a year	11.6	6.7	5.2	6.0	12.0	9.5
Several times a year	15.0	12.1	10.6	10.3	11.0	9.1
About once a month	6.3	5.4	2.7	3.6	3.4	2.0
2-3 times a month	4.7	3.8	4.0	3.8	2.6	1.3
Nearly every week	2.2	6.9	4.3	3.3	2.4	1.0
Every week	19.3	14.3	4.6	5.7	3.2	2.0
Several times a week	2.5	2.1	8.2	4.9	1.8	0.9
Once a day	0.5	-	16.5	13.9	0	-
Several times a day	0		12.3	6.3	0	-

n = 10,416

n = 12,287

n = 12,388

West/East differences

p < .0001

p < .0001

p < .0001

Table 3a: Percentages of respondents

Religious Biography	West	East
Never believed	12.6	28.4
Don't believe, but used to	15.7	14.5
Believe, but didn't	6.0	4.2
Always believed	65.7	52.9

n = 10,922

West/East Difference p < .0001

Table 3b: Percentages of respondents

Religious Biography	West	East
Respondent goes to religious services...		
Less frequently than at age 11-12	49.6	46.2
About as frequently as at age 11-12	17.9	23.0
More frequently than at age 11-12	32.5	30.8

n = 10,922

West/East Difference p <.0001

On all three ethical issues - sexual behavior, abortion, and duties towards the state - remarkable differences between West and East can be observed: Easterners are less opposed to premarital or extramarital sex but much less tolerant of adult homosexual behavior (see Table 4).

Table 4: Percentages of respondents

Attitudes in sexual matters	Premarital sex		Extramarital sex		Homosexuality	
	West	East	West	East	West	East
Always wrong	10.7	7.1	52.3	45.9	42.9	61.8
Almost always wrong	5.6	6.5	29.1	28.2	9.5	12.0
Wrong only sometimes	19.7	14.3	14.5	18.5	14.4	8.6
Not wrong at all	64.0	72.2	4.2	7.5	33.2	17.6

n = 11,676

n = 11,667

n = 10,274

West/East differences

p < .0001

p < .0001

p < .0001

On the abortion issue, Easterners also are less opposed to abortion if the baby has a serious defect (a pretest confirmed the notion that, for respondents who are generally opposed to

abortion, this may constitute an acceptable excuse for an otherwise unacceptable decision) or if the baby would be born into a family with very low income (tolerance here in most respondents would mean tolerance for the former kind of excuse (see Table 5).

Table 5: Percentages of respondents

Attitudes on abortion	Abortion if... a serious defect in the baby, is...		Abortion if... family has a very low income, is...	
	West	East	West	East
Always wrong	17.3	9.9	34.4	16.2
Almost always wrong	8.8	5.8	18.7	12.1
Wrong only sometimes	17.7	10.2	22.5	23.1
Not wrong at all	56.3	74.1	24.4	48.7

n = 10,652

n = 10,352

West/East differences

p < .0001

p < .0001

In fulfilling duties towards the state (honesty as taxpayer and honesty as benefit recipient) there is an interesting difference to be reported within the overall West-East comparison: more Easterners have few or no scruples about cheating the tax-collector, but in their readiness to excuse cheating the welfare office, the 40 years division of the continent by the Iron Curtain fortunately seem to have been already overcome; an astonishing 90% of all respondents find this behavior acceptable (see Table 6).

Table 6: Percentages of respondents

Attitudes in duties towards the state	If a taxpayer does not report income in order to pay less tax, this is...		gives incorrect information to get government benefits, this is...	
Seriously wrong	10.3	7.4	2.4	2.0
Wrong	31.6	19.8	7.7	6.8
A bit wrong	36.3	50.3	37.6	49.8
Not wrong	21.8	22.4	52.4	41.4

n = 7,170

n = 5,150

n = 7,280

n = 5350

West/East differences  $p < .0001$

With regard to parareligious belief contents and practices, three observations are to be reported here:

1. In all dimensions of what we have called parareligious beliefs, a high proportion of all respondents believed in **religious miracles**, **faith healers**, **good luck charms**, **fortune tellers**, and **horoscopes** (values "Yes, definitely" or "Yes, probably" for **religious miracles**, and "Definitely true" or "Probably true" for the other items). If we identify respondents as "atheists" or non-religious, who answered "I don't believe" or "I don't know whether he exists" in the item **BELIEF**; and: "I don't believe" or "Not close at all" in the item **CLOSE**, and compare them with: "believer" respondents with answers "I have doubts" or "I know that God really exists and have no doubts about it" in the item **BELIEF**, and "I feel somewhat close" or "I feel extremely close" in the item **CLOSE**, or with "religiously disoriented" respondents - all other answer combinations in the items **BELIEF** and **CLOSE**, then we in particular can observe a surprisingly high proportion of self proclaimed atheists or non-religious respondents who believed in **religious miracles**, **faith healers**, **good luck charms**, **fortune tellers**, and **horoscopes**.

2. In contrast to our expectations, however, not the "atheists" showed the highest proportions of parareligious beliefs, but in items **religious miracles** and **faith healers** the "believers", and in the other items the "disoriented" showed the highest proportions (see table 7). In fact, belief in **religious miracles** and in **faith healers with God-given powers** is not central to, but



compatible with the Christian faith - according to the gospels, Jesus of Nazareth did miracles and was a faith healer with God-given powers - and, thus, perhaps should not be labelled as parareligious in a Christian context. Belief in **good luck charms**, **fortune tellers**, and **horoscopes** on the other hand, definitely is incompatible with the teachings of the Christian faith. Perhaps only a slight modification of the items **religious miracles** and **faith healers** - maybe just "miracles" or "faith healers with supernatural powers" might have lead to a drop in consent among the "believer" respondents. Along this reasoning, it could be argued that parareligious beliefs are most common among the religious disoriented.

Table 7: Percentages of parareligious beliefs among "atheist", "disoriented" and "believer" respondents

Believing in...	Atheist	Disoriented	Believer
Religious miracles	14.7	45.2	74.5
Faith healers	29.3	55.2	61.5
Good luck charms	27.4	35.8	28.7
Fortune tellers	26.0	39.5	34.2
Horoscope	21.5	37.5	31.1

n in cells > 500. For all items in pairwise comparisons:  $p < .0001$

3. There are surprising West-East differences also in parareligious beliefs: save in the dimension belief in **religious miracles** substantially more people in the East believe in **good luck charms**, **fortune tellers**, **faith healers**, and **horoscopes**. If we concentrate on respondents who identify themselves as non-believers (respondents with answers "I don't believe" or "I don't know whether he exists" in the item **BELIEF**; and with answers "I don't believe" or "Not close at all" in the item **CLOSE**. substantially more people in the East believe in **religious miracles**, **faith healers**, **good luck charms**, **fortune tellers**, and **horoscopes**.

Table 8: Percentages of non believing respondents

Believing in...	West	East
Religious miracles	8.5	18.6
Faith healers	27.0	42.0
Good luck charms	24.5	28.0
Fortune tellers	18.3	27.7
Horoscope	19.2	22.0

n in cells > 500. All items:  $p < .01$

The West East differences could be secured also in the multivariate analyses (see below).

The reader should bear in mind that - save belief in **religious miracles** - belief in **faith healers, good luck charms, fortune tellers, and horoscopes**. was recorded only in a part of the nations under study (see section 2.2).

### 3.2 Multivariate Analyses

The West-East distinction is unlikely to explain all differences between the Western and Eastern groups of nations. Especially in the various aspects of religion practice, and, even more so in the impact of religious attachment on ethical orientations, external opportunities and context factors together with individual characteristics, must be taken into account as possible intervening variables.

The following dependent variables were considered in a series of multivariate linear (OLS) regressions:

- 1a) BELIEF;
- 1b) CLOSENESS;
  
- 2a) Frequency of attendance at religious services at the time of the interview;
- 2b) Frequency of attendance at religious services when the respondent was 11-12 years old;
- 2c) Frequency of praying at the time of the interview;

2d) Frequency of attendance at church activities other than services, at the time of the interview;

3a) Attitudes towards premarital sex;

3b) Attitudes towards extramarital sex;

3c) Attitudes towards homosexuality;

4a) Attitudes towards abortion for biological reasons;

4b) Attitudes towards abortion for social reasons;

5a) Attitudes towards tax evasion;

5b) Attitudes towards welfare cheating.

In a series of logistic regressions differences between adherents of parareligious beliefs and non-adherents were tested:

6a) Belief in religious miracles;

6b) Belief in faith healers;

6c) Belief in good luck charms;

6d) Belief in fortune tellers;

6e) Belief in horoscopes.

Independent factors, other than the West-East distinction are:

a) Individual denomination, sex, age, and education as demographic variables;

b) Percentage of Protestants and percentage without denomination in the country of residence as context variables (Percentage of Catholics is the complement to the sum of both, and, therefore, cannot be used as another independent variable);

c) BELIEF and CLOSENESS as variables of individual religious attachment.

All variables (except those which are binary) are represented by ordinal scales having at least four value expressions each; this, together with the large number of cases, makes the OLS regression model applicable.

In addition, in order to detect West-East differences in the complex relations between the dependent and independent variables, all analyses were performed separately for the Western and Eastern groups of countries.

A cautionary provision as safeguard against an  $\alpha$ -error: Given the large number of cases, effects will be considered as nonexistent if coefficient estimations give  $p > 0.01$ . Effects will be considered strong for  $\beta > .2$ , moderate for  $\beta < .1$ , weak for  $\beta > .05$ , and negligible otherwise. The goodness-of-fit of the models as a whole varies considerably. Practically all models, even those with very low adjusted R-squared (or other goodness-of-fit measures in the case of logistic regression models) show levels of high significance, which again should not come as surprise, given the large number of cases.

### 3.2.1 (Tables A1-A2)

For both measures of belief-content and spiritual attachment, there emerges a common pattern in the differences between East and West, with some few variations.

In both measures, living in the East had a strongly negative effect on depth of conviction and closeness of spiritual attachment - as it was observed already in the simple bivariate analyses.

The percentage of Protestants living in the population of residence was a strongly negative predictor, considerably stronger than percentage of persons without denomination in the same population. Being Catholic, on the other hand, was strongly positive predictor of depth of conviction and closeness of spiritual attachment, distinctly stronger than being Protestant, which means, that, if we look at the church members only, being Protestant will change sign and becomes a negative predictor of both measures.

Age and being female are positive predictors.

These effects can be observed in the total sample as well as in the East sample and the West sample analyzed separately; some additional findings also emerge.

In the West, a college education is no predictive value at all, while in the East is a negative predictor of depth of conviction and closeness of spiritual attachment. Also, in the East, the percentage of Protestants living in the population of residence here was a weaker negative predictor than percentage of persons without denomination.

Adjusted R-Square of the models is for both measures above .28, in the total sample as well as in the Western and Eastern samples taken separately, which means that we have been considering some of the most important factors for the variance in the dependent variables.

### 3.2.2 (Tables A3-A6)

For all four indicators of the frequency of religious practice, some common patterns of effects can be seen in the effects:

of the individual demographic characteristics: age, female sex and a college education have weak but consistently positive effects on present and past frequency of service attendance, on frequency of praying and church activities attendance.

Being Catholic has a strong positive effect on present and past attendance at services and a weak effect on frequency of praying and attendance at church activities. Being Protestant has effects in the same direction, but weaker; these latter effects, as expected, change their sign, when only church members are considered.

BELIEF, the degree of conviction of God's existence and CLOSENESS, the feeling of CLOSENESS to God, are strong positive predictors for all four frequencies, with CLOSENESS in most cases (as elsewhere) being the stronger and better predictor.

Quite remarkable is the context effect of percentage of Protestants in the country of residence: here we have negative effects on all four frequencies, strong for past, moderate for present frequency of service attendance and weak for the other two frequencies. The percentage of people with no religious affiliation in the population, on the other side, had no effect whatsoever. Residence in the Eastern group of countries had no effect on present frequency of service attendance, a weak negative effect on past service attendance frequency, and negligible negative effects otherwise. Separate analyses for East and West yield the same picture as the joint analysis: the same effects of the individual characteristics: age, sex, education and Catholic/Protestant denomination, and of the context variables: the percentage of Protestants, the percentage with no denomination. BELIEF and CLOSENESS have the same effects in the West as in the East with CLOSENESS consistently being the stronger and better predictor of the two.

Adjusted R-Square of the models for the two measures of service attendance and of praying is above .50 for the total sample, as well as for the Western and Eastern samples taken separately, which means that we have indeed been considering the most important factors of the variance in the dependent variables. The models are best in predicting frequency of praying, with adjusted R-Square above .60. Adjusted R-Square of the model for predicting the frequency of attendance at church activities other than services is between .16 and .19.

### 3.2.3 (Tables A7-A9)

From now on, in addition to the independent variables already encountered, present frequency of attendance at services, of praying and of attendance at church activities other than services, were now included in the model as additional independent variables.

Attitudes to premarital, extramarital sex and homosexuality, even within a well-reasoned ethical orientation can vary with respect to each other much more than the behavior habits analyzed earlier, and so do the effects observed for the three single issues.

There are three consistent effects: respondents living in a eastern country, older respondents, and respondents without a college education are less indulgent towards the three types of deviance from the norm of heterosexual, exclusively intramarital sex. The West-East effect is strongest - actually the strongest of all observed for that issue - in attitudes towards homosexuality and weakest towards extramarital sex. Women are less tolerant of extramarital and more tolerant of homosexual sex (probably they consider both as issues which mainly concern males). Neither the respondent's denomination nor the distribution of church membership in the population had noteworthy consistent effects. Surprisingly, being Catholic as well as being Protestant, in the West as well as in the East, increased readiness to tolerate premarital sex. A possible explanation is that premarital sex among young adults, already in a serious relationship with each other, is widely accepted at present, while strict opposition to premarital sex is a majority position only in small religious communities outside the two major Christian denominations in the countries under study. Perhaps some of the respondents belonging to such a smaller community have not identified their affiliation in the interview, and have so contributed to that unexpected statistical trend.

High scores in BELIEF and CLOSENESS go with lower tolerance of the three types of deviance from the norm of exclusively heterosexual, intramarital sex, but the effects are weak or absent. The three measures of religious practice - frequency of service attendance, praying and activities attendance - are consistent and often strong predictors of opposition to premarital, extramarital and homosexual sex, frequency of service attendance usually being the strongest.

Some modifications in this picture have to be reported once East and West are analyzed separately.

In the West, a higher percentage of Protestants in the population has a weak positive effect on readiness to tolerate premarital and homosexual sex and a weak negative effect on readiness to tolerate extramarital sex. A higher proportion with no denomination in the population has a moderate positive effect on readiness to tolerate premarital sex and a strong positive effect on readiness to tolerate homosexuality.

When, in the East, the population has a higher percentage with no denomination, this is a strong predictor of greater tolerance towards sexual deviation in all three forms. A higher percentage of Protestants has a negative effect (moderate to strong) on tolerance of premarital and homosexual sex, but a moderately positive effect on tolerance of extramarital sex. The indicators of religious practice (frequency of attendance at services, of praying, and of attendance at other activities) are much weaker predictors of attitudes on sexual issues, and often show no effect at all.

Values of the adjusted R-Square of the models for attitudes towards premarital and homosexual sex are around .30, for the total sample as well as for the Western and Eastern samples taken separately; this means that we have been dealing with some of the important factors of the variance in the dependent variables. The values of the adjusted R-Square of the model for predicting attitudes towards extramarital sex are much lower, between, .08 and .12; this means that most of the factors contributing to a respondent's expressed attitudes on this question have not been captured in the list of independent variables of the model.

#### 3.2.4 (Tables A10-A11)

In contrast to the three issues of sexual behavior, the two items connected with abortion can easily be treated as a one-dimension attitude-measure of the Guttman-scale type; of 10,500 respondents, only 5% expressed greater opposition to abortion for biological than for social reasons, with 58% expressing about the same degree of opposition, and 37% being less opposed to abortion for biological than for social reasons.

In the East, abortion for either reason is more accepted than in the West, and the difference is even greater when abortion is for social reasons.

Age, sex and education had no effect. As in the case of premarital sex membership in the Catholic church or in one of the Protestant churches was associated even with a greater acceptance of abortion for biological reasons. The proportion of Protestants in the population has a weak positive effect on the acceptance of abortion. Also, BELIEF and CLOSENESS have little or no effect on a respondent's attitudes towards abortion. Only the indicators of religious practice (frequency of attendance at services, or praying, and of attendance at other activities) are moderate or strong predictors of opposition to abortion, the frequency of attendance at services being the strongest of these.

In separate analyses, the findings for the West differ a little from those for the East. The positive effect on acceptance of abortion of the percentage of Protestants in the population is much more pronounced in the West than in the East. The negative effect of the three indicators of religious practice is also present, but weaker in the East.

Adjusted R-Square scores of the models for the attitudes towards abortion for biological and for social reasons are between .17 and .21 in the Western subsample, and between .10 and .14 in the Eastern subsample, giving additional support to the interpretation that religious beliefs and habits of observance are not the only factors shaping a respondent's expressed attitudes in this matter; their effect in the East is even weaker than in the West.

### 3.2.5 (Tables A12-A13)

When it comes to duties as a taxpayer or recipient of government benefits, Easterners are found to be more indulgent towards tax-evasion. Greater age and a college-education also favor acceptance in this respect. A high proportion in the population of persons with no denomination is the strongest predictor of intolerance towards tax-evasion, followed in strength by being Catholic. BELIEF and CLOSENESS, and also the indicators of religious practice, show no consistent effects. With regard to welfare-cheating, it seems difficult to identify any variable (individual, of context, or religious) which has a strong effect in either direction. Surprisingly, CLOSENESS to God seems to make a respondent more forgiving towards both types of cheating. Respondents with no denomination, more sophisticated in their reasoning, judge tax-evasion by stricter standards but show understanding of welfare-cheating; and this can be understood as meaning that the governments coffers need to be filled before they can be looted.

Separate analyses reveal that the effect of the percentage of the population with no denomination is much stronger in the West. In the East, the percentage with no denomination also goes with opposition to welfare-cheating. Here, the percentage of Protestants in the population goes with a more severe judgment of tax-evasion but a milder judgment of welfare-cheating.

It is interesting to note that, in the West, being either Catholic or Protestant goes with stricter standards in tax-evasions, but only being Catholic is associated also with stricter standards on welfare-cheating.

Values of adjusted R-Square of the models for attitudes towards cheating the tax-collector or the social worker are .04 for cheating on taxes and .02 for cheating on welfare. It is clear that



religious beliefs and habits of observance have only a minor influence on a respondent's expressed attitudes to honesty towards the community.

### 3.2.6 (Tables A14-A18)

Logistic regressions of parareligious beliefs showed, that the West East differences reported in section 3.1 cannot be explained by confounding variables. In fact, once the generally lower levels of religious commitment are taken into account, the East's greater inclination towards parareligious beliefs even grows in relative size.

If we consider all respondents, only in the item belief in **religious miracles**, residence in the East had a small negative effect. For all other items, **faith healers**, **good luck charms**, **fortune tellers**, and **horoscopes**, residence in the East not only had a consistently positive, but had the absolutely strongest effect of all independent variables considered here. Also, if we consider only respondents identified as "atheist" (see section 3.1), residence in the East not only had a consistently positive, but had the absolutely strongest effect of all independent variables considered here in the items belief in **religious miracles**, **faith healers**, **fortune tellers**, and **horoscopes**. In this subgroup, in the item belief in **good luck charms**, age was the absolutely strongest predictor, but, residence in the East also here was a sizeable positive predictor.

### 3.2.7 (Tables A19-A21)

Some substantial findings can be reported about the distribution of religious biographies. If we compare the frequency of losing BELIEF in Gods existence ("I don't believe, but used to ...") and of gaining such BELIEF ("I believe, but did not before"), then, against expectations, both kinds of biography occur a little more often in the West than in the East.

Interestingly, although the percentage of Protestants in a population, or the percentage with no denomination, made the loss of religions in a respondent's biography, more likely, coming to believe in Gods existence during one's lifetime occurred more often among Protestants than among Catholics.

Catholicism had a different effect: it does not make conversion to faith more likely, either as a context-variable or as an individual characteristic, but it prevented loss of faith. These effects, as a contextual or individual variable, when present, were stronger in the West. Also, age made a GAIN less likely; it was less frequent for older respondents not to have believed when

they were young. Men were more likely to gain or lose belief than women. Basically the same findings emerge from separate analyses for East and West.

Biographical change in attendance at services (i.e. whether the respondent, at the time of the interview, goes to church more frequently, about as frequently, or less frequently, than when aged 11-12) is also subject to various influences which were detectable in this investigation, but no difference was found between East and West.

The percentage with no denomination in a population, and also the percentage of Protestants, are good predictors of a downward trend in this respect, while being Catholic is the strongest predictor of a trend that is at least stable. The positive effect of being Protestant changes sign and becomes negative, if respondents with no denomination are excluded from the analysis.

The same patterns appear in separate analyses for West and East.

Values of adjusted R-Square of the models for the measures of religious biography are between, .003 and .07 for the Western subsample, and between .06 and .15 for the Eastern subsample. It is clear that much more needs to be considered regarding the respondent's biography and social context, before a reliable understanding of the variance in the dependent variable is possible.

### 3.2.8

If we look for differences between West and East in these dimensions, among those active members of the Catholic or Protestant churches who attend services at least once a month, and if we replicate the multivariate analyses in search of a change in the relative weight of the effects of different factors, then there are some changes to report, but not many.

Among active Church-members in the East, the conviction of God's existence is more profound, and respondents feel closer to God than in the West. The percentage of persons with no denomination becomes a stronger negative predictor of the depth of conviction and closeness of spiritual attachment than the percentage of Protestants, whether both regions are analyzed together or separately.

Within this particular subgroup, being Protestant is a positive predictor of both measures of religious belief, so that within this particular subgroup being Catholic is a negative predictor. This, however, may be an effect of the way how we defined this subsample: monthly

attendance at services is a less precise filter-criterion for defining an active Catholic than an active Protestant.

Attendance at services and other activities is rarer in the East, probably because there is less opportunity; the frequency of praying is the same in both regions. Church-members in the East are more tolerant of premarital sex and less tolerant of homosexual sex. No difference is found regarding extramarital sex. Easterners are also more tolerant of abortion (for biological or for social reasons). Easterners are less opposed to cheating on taxes than on welfare-benefits. There is no difference worth mentioning in religious biographies.

Multivariate analyses of the factors contributing to the past or present frequency of attendance at services, of praying, and of attendance at other church-activities, yielded the same patterns in East and West as found for the total sample: the percentage of Protestants in the population, and the percentage with no denomination, as well as being Protestant oneself, were moderate predictors of lower frequencies even within the sample of active church-goers. One exception is found here: a high percentage of Protestants, as well as being Protestant oneself, had a positive effect on attendance at church-activities in this subgroup, perhaps because there are greater opportunities in Protestant communities.

Attitudes to sexual matters showed the differences between East and West which we have already mentioned Easterners being more accepting of premarital and extramarital sex, but less tolerant of homosexual activity. On all three items, Protestants were less tolerant than Catholics. Otherwise, the percentage with no denomination was the most consistent positive predictor for all three items, and age the most consistent negative predictor. Also in this subsample, the same factors, influenced judgments on abortion as in the total sample, with - Easterners showing much greater acceptance, and a high frequency of church-attendance being a strong predictor of opposition even in the East.

Regarding honesty towards the government, in collecting or distributing money, only one factor showed a noteworthy effect not previously mentioned: Protestants expressed more tolerance towards cheating.

In religious biographies, older persons were less likely to have come to believe in God as an adult; among the elderly, those who believe in God had believed since childhood. Living in a country with a high proportion without denomination, or of Protestants, was by far a better predictor of a lower frequency of church-attendance at the time of the interview than individual frequency of church-attendance at the age of 11-12.



## 4. DISCUSSION

Five general insights can be extracted from these findings.

### 4.1

The levels of religious convictions and attachments, and of religious observance, are considerably lower in the East than in the West.

In the East, fewer people believe in the existence of a personal God (with no indications of any belief other than monotheistic), or feel a spiritual closeness to a personal God. People in the East go less frequently to services and other church-activities, and pray less often. This difference is the result of a slow gradual process, and not of any sudden change. If we compare West and East in terms of individual religious biographies of respondents, we do not find any sign of dramatic trends on either side, while the iron curtain existed or later.

Within individual biographies, fundamental changes in religious orientation are rarer than stability: 78% in the West and 81% in the East did not change. About 15% in the East and West had changed to being non-believers, while 6% of Westerners and 4% of Easterners had changed and became believers. A very small negative correlation between age and the likelihood of losing belief can be interpreted most probably as a life-cycle effect.

Also, Easterners show a stability in their church-going between the age of 11-12 and the time of the interview that is even greater than that of Westerners. Both decrease as well as increase in frequency was found more often in Western biographies than in the East ( $p < .0001$  in both cases).

It is clear, for more people in the East than in the West, their personal distance towards religion (or complete loss of belief) is not something that occurred within their own lives, but something with which they grew up. As in many other dimensions of social life, fundamental changes of orientation appear as a difference between generations more than as a shift within individual biographies.

In particular, there are no signs of any resurgence of religion in the East, not even amid the political and moral turmoil in the beginning of the 1990s, when this survey was conducted and when memories of life under communist rule, and of the recent collapse of that system, were vivid in the populations of Eastern Europe. It can be assumed that the proportion of Eastern respondents who identify themselves as going to church more often than when they were young, or who identify themselves as converts, may in fact be even smaller today. Perhaps the

most plausible conclusion is that communist rule merely accelerated a process of secularization which at present seems more virulent in the West than in the East. But we have no indicators, that this process cannot continue even further in the East. In former East Germany, only 25% are believers, Protestants and Catholics taken together; in Poland the corresponding figure is 95%, still a large proportion.

#### 4.2

Predominantly Protestant societies, as well as Protestant individuals, have been and are less resistant to the process of secularization than predominantly Catholic societies and Catholic individuals. An important finding from the multivariate analyses is that the context-effect is stronger (sometimes much stronger) than the individual effect: the more Protestants there are in a given society, the lower the levels of religious conviction and attachment, and the lower the level of observance, whether we consider the population as a whole, or all of the church-members, or only the active members of the churches.

In contrast to the percentage Protestants, the percentage in a given population which belongs to no denomination is a weaker and rather erratic negative predictor of levels of conviction, attachment, and observance. This points to the role of the religious culture as it has developed over generations, rather than to the process of openly abandoning religion, which (as a mass phenomenon) is a rather recent development. The strong effect of a Protestant majority-culture on greater secularization of the individual belief and observance habits of respondents in general (including Catholics) is of the same magnitude as for the comparison between West and East.

Belonging to a particular denomination has a weaker effect, but it goes in the same direction. Catholics have more firmly-rooted convictions and go to church more often; but in general they do not feel closer to God and do not pray more often than Protestants. Among active church-members, in fact, Protestants have deeper convictions, feel a closer attachment and pray more often than Catholics. But if we control religious conviction, these differences vanish again; monthly attendance at service is a less precise filter-criterion for an active Catholic than for an active Protestant.

#### 4.3

The "hard cores" of active church-members (who go to church at least once a month) are smaller in the East than in the West, and there is little reason to think of these "hard cores", in

the East, as being more resistant to the winds of change than their counterparts in the West. It is true that in the East one finds somewhat stronger convictions and somewhat stronger spiritual attachment than in the West; but the differences are small. Easterners attend services and other church-activities less often; this may be due to fewer opportunities.

There are even fewer converts among practicing Westerners. Thus, the active "cores" in church membership in the West are as much of a traditionalist nature as in the East. They are, in addition, as open to influences from the surrounding society which becomes a bit less religious every year.

#### 4.4

The influence of religious convictions and observance on ethical attitudes expressed in the interview is limited, even among devout church-members. Since the pressure to give socially acceptable answers to these questions can be considerable, the extent to which even devout church-members express attitudes totally at variance with central teachings of their churches is astonishing. On the issues of sexuality and abortion, the West-East distinction shows a greater effect than religious convictions of observance, or individual denominational affiliation. In the East, one finds more acceptance of premarital and extramarital sex, but less tolerance of homosexual activity. In the East, again, abortion is widely accepted as a legitimate means of family-planning, even among active church-members.

It is interesting to note that Protestants are more indulgent than Catholics when it comes to cheating on taxes or welfare-benefits; this finding is not easily reconcilable with established theories about the Protestant work-ethic. In any case, the effect of religious convictions and observance on expressed ethical attitudes are weak and inconsistent, or else non-existent.

Also, it should be reminded that all these results refer to expressed attitudes, which may differ from "real" attitudes, as attitudes may differ from actual behavior.

#### 4.5

To a large extent, non-believers are not irreligious. Parareligious beliefs are fairly common among respondents who proclaim themselves as non-believers, sometimes not much rarer than among believers. If we take into account that in the items belief in **good luck charms**, **fortune tellers**, and **horoscopes** respondents identified as "religiously disoriented" showed the highest consent, we have some reason to regard parareligious beliefs as an indicator for an

unorganized religious potential or unmet religious quests. From the substantially greater inclination of Easterners towards these forms of religiosity, and especially from the substantially greater inclination of Eastern non-believers as compared with Western non-believers, we then can draw the - speculative but not unfounded - conclusion there might be a greater unorganized religious potential or higher unmet religious demands in the East. Nothing follows from that for the question, whether and how established churches might recuperate this territory, or whether this unorganized religious potential, in the context of an individualistic society, will vanish in East as it has vanished in West.



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Appendix: Coefficients of the multivariate regressions (For categories of variables see Section 2.1)

Table A1: BELIEF

Dependent Variable: BELIEF 6 levels. "I don't believe" = 1; "I know that God really exists" = 6	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.188495	-22.854	.0000
Percentage without denomination	-.107559	-11.174	.0000
Percentage of Protestants	-.157490	-14.069	.0000
Respondent is Catholic (binary variable)	.457679	36.922	.0000
Respondent is Protestant (binary variable)	.339485	29.775	.0000
Age	.121540	15.363	.0000
Sex (female=1 - male=2)	-.088199	-11.272	.0000
College Education (binary variable)	-.025779	3.265	.0011
adjusted R-square= .30058			<b>Sig F</b> .0000

Table A2: CLOSENESS

Dependent Variable: CLOSENESS 5 levels. "I don't believe" = 1; "Extremely close" = 5	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.208237	-25.455	.0000
Percentage without denomination	-.066616	-6.981	.0000
Percentage of Protestants	-.138384	-12.454	.0000
Respondent is Catholic (binary variable)	.481564	39.173	.0000
Respondent is Protestant (binary variable)	.372412	32.910	.0000
Age	.156942	20.006	.0000
Sex (female=1 - male=2)	-.096555	-12.445	.0000
College Education (binary variable)	-.018395	-2.350	.0188
			Sig F
adjusted R-square= .31590			.0000

Table A3: Present Frequency of Service Attendance

Dependent Variable: Present Frequency of Service Attendance  11 levels. "never" = 1;  "several times a day" = 11	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.005985	-.817	.4142
Percentage without denomination	-.013989	-1.541	.1234
Percentage of Protestants	-.136389	-13.710	.0000
Respondent is Catholic (binary variable)	.230397	18.480	.0000
Respondent is Protestant (binary variable)	.063301	5.827	.0000
BELIEF	.289471	23.000	.0000
CLOSENESS	.271010	21.439	.0000
Age	.047786	6.640	.0000
Sex (female=1 - male=2)	-.014777	-2.100	.0357
College Education (binary variable)	.029853	4.233	.0000
			Sig F
adjusted R-square= . .52995			.0000

Table A4: Frequency of Service Attendance at age 11-12

Dependent Variable: Frequency of Service Attendance at age 11-12  9 levels. "never" = 1;  "several times a week" = 9	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.096670	-13.400	.0000
Percentage without denomination	-.005780	-.701	.4831
Percentage of Protestants	-.227173	-23.766	.0000
Respondent is Catholic (binary variable)	.365301	32.365	.0000
Respondent is Protestant (binary variable)	.119892	11.811	.0000
BELIEF	.159816	13.264	.0000
CLOSENESS	.208247	17.150	.0000
Age	.121516	17.753	.0000
Sex (female=1 - male=2)	-.014247	-2.125	.0336
College Education (binary variable)	.019097	2.841	.0045
			Sig F
adjusted R-square= .50344			.0000

Table A5: Present Frequency of Praying

Dependent Variable: Present Frequency of Praying  11 levels. "never" = 1;  "several times a day" = 11	Beta	T	Sig T
Independent Variables:			.0000
West/East (West=1 - East=2)	-.038269	-6.117	.0000
Percentage without denomination	.017094	2.400	.0164
Percentage of Protestants	-.080547	-9.693	.0000
Respondent is Catholic (binary variable)	.083141	8.483	.0000
Respondent is Protestant (binary variable)	.028293	3.206	.0014
BELIEF	.340726	32.555	.0000
CLOSENESS	.402153	38.127	.0000
Age	.072507	12.247	.0000
Sex (female=1 - male=2)	-.079628	-13.728	.0000
College Education (binary variable)	.013482	2.320	.0204
			Sig F
adjusted R-square= .63060			.0000

Table A6: Present Frequency of Attendance at Church Activities other than Services

Dependent Variable: Present Frequency of Church Activities Attendance  11 levels. "never" = 1;  "several times a day" = 11	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.036407	-3.928	.0001
Percentage without denomination	.061210	5.781	.0000
Percentage of Protestants	.035387	2.872	.0041
Respondent is Catholic (binary variable)	.035923	2.476	.0133
Respondent is Protestant (binary variable)	.047871	3.665	.0002
BELIEF	.181165	11.681	.0000
CLOSENESS	.251101	16.082	.0000
Age	.021667	2.466	.0137
Sex (female=1 - male=2)	-.019189	-2.229	.0258
College Education (binary variable)	.022815	2.645	.0082
			Sig F
adjusted R-square= .18169			.0000

Table A7: Attitudes towards Sexuality: Premarital Sex

Dependent Variable: Attitudes towards Sexuality: Premarital Sex  4 levels. "always wrong" = 1;  "Not wrong at all" = 4	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.049487	-5.244	.0000
Percentage without denomination	.133264	11.429	.0000
Percentage of Protestants	.045055	3.387	.0007
Respondent is Catholic (binary variable)	.160337	9.690	.0000
Respondent is Protestant (binary variable)	.105178	7.498	.0000
BELIEF	-.038507	-2.252	.0244
CLOSENESS	-.064601	-3.691	.0002
Present Frequency of Service Attendance	-.250233	-16.054	.0000
Frequency of Service Attendance at age 11-12	.033740	2.611	.0091
Present Frequency of Praying	-.141843	-8.379	.0000
Present Frequency of Church Activities Attendance	-.081947	-7.551	.0000
Age	-.189823	-20.251	.0000
Sex (female=1 - male=2)	-.001877	-.207	.8364
College Education (binary variable)	.021326	2.358	.0184
			Sig F
adjusted R-square= .29488			.0000



Table A8: Attitudes towards Sexuality: Extramarital Sex

Dependent Variable: Attitudes towards Sexuality: Extramarital Sex  4 levels. "always wrong" = 1;  "Not wrong at all" = 4	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.011738	-1.111	.2666
Percentage without denomination	-.036580	-2.803	.0051
Percentage of Protestants	-.058240	-3.891	.0001
Respondent is Catholic (binary variable)	.027924	1.499	.1340
Respondent is Protestant (binary variable)	-.006008	-.382	.7026
BELIEF	-.083316	-4.375	.0000
CLOSENESS	-.064777	-3.326	.0009
Present Frequency of Service Attendance	-.151259	-8.647	.0000
Frequency of Service Attendance at age 11-12	.039126	2.706	.0068
Present Frequency of Praying	-.107608	-5.674	.0000
Present Frequency of Church Activities Attendance	.014671	1.209	.2265
Age	-.044265	-4.213	.0000
Sex (female=1 - male=2)	.065439	6.430	.0000
College Education (binary variable)	.046986	4.632	.0000
			Sig F
adjusted R-square= .11019			.0000

Table A9: Attitudes towards Sexuality: Homosexual Sex

Dependent Variable: Attitudes towards Sexuality: Homosexual Sex  4 levels. "always wrong" = 1;  "Not wrong at all" = 4	Beta	T	Sig T
Independent Variables:  West/East (West=1 - East=2)  Percentage without denomination  Percentage of Protestants  Respondent is Catholic (binary variable)  Respondent is Protestant (binary variable)  BELIEF  CLOSENESS  Present Frequency of Service Attendance  Frequency of Service Attendance at age 11-12  Present Frequency of Praying  Present Frequency of Church Activities Attendance  Age  Sex (female=1 - male=2)  College Education (binary variable)			
	-.062534	-3.506	.0005
	-.131894	-8.186	.0000
	.019659	1.478	.1394
	-.051381	-2.920	.0035
	-.019043	-1.710	.0873
	-.181710	-18.688	.0000
	-.089696	-9.571	.0000
	.082631	8.821	.0000
			Sig F
adjusted R-square= .31671			.0000

Table A10: Attitudes towards Abortion: Biological Reasons

Dependent Variable: Attitudes towards Abortion: Biological Reasons  4 levels. "seriously wrong" = 1;  "Not wrong" = 4	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	.075743	6.836	.0000
Percentage without denomination	.030818	2.253	.0243
Percentage of Protestants	.065608	4.175	.0000
Respondent is Catholic (binary variable)	.057442	2.984	.0028
Respondent is Protestant (binary variable)	.040571	2.522	.0117
BELIEF	.010783	.528	.5972
CLOSENESS	-.042150	-2.033	.0420
Present Frequency of Service Attendance	-.207202	-11.263	.0000
Frequency of Service Attendance at age 11-12	.016975	1.131	.2581
Present Frequency of Praying	-.122998	-6.193	.0000
Present Frequency of Church Activities Attendance	-.105210	-8.367	.0000
Age	.024579	2.268	.0234
Sex (female=1 - male=2)	-.030820	-2.954	.0031
College Education (binary variable)	.006886	.662	.5078
			Sig F
adjusted R-square= .16769			.0000

Table A11: Attitudes towards Abortion: Social Reasons

Dependent Variable: Attitudes towards Abortion: Social Reasons  4 levels. "seriously wrong" = 1;  "Not wrong" = 4	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	.197951	18.090	.0000
Percentage without denomination	-.051671	-3.839	.0001
Percentage of Protestants	.074284	4.782	.0000
Respondent is Catholic (binary variable)	-.001494	1.751	.0800
Respondent is Protestant (binary variable)	-.001494	-.094	.9253
BELIEF	-.022300	-1.117	.2642
CLOSENESS	.3633	-2.583	.0098
Present Frequency of Service Attendance	-.181135	-9.882	.0000
Frequency of Service Attendance at age 11-12	.013487	.909	.3633
Present Frequency of Praying	-.147410	-7.465	.0000
Present Frequency of Church Activities Attendance	-.064333	-5.168	.0000
Age	.044254	4.132	.0000
Sex (female=1 - male=2)	-.036586	-3.549	.0004
College Education (binary variable)	-.006301	-.614	.5393
			Sig F
adjusted R-square= .20380			.0000

Table A12: Attitudes towards Tax Evasion

Dependent Variable: Attitudes towards Tax Evasion  4 levels. "seriously wrong" = 1;  "Not wrong" = 4	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	.135765	12.478	.0000
Percentage without denomination	-.126414	-9.426	.0000
Percentage of Protestants	.075910	4.940	.0000
Respondent is Catholic (binary variable)	-.125607	-6.566	.0000
Respondent is Protestant (binary variable)	-.056674	-3.499	.0005
BELIEF	.003003	.154	.8780
CLOSENESS	.055395	2.759	.0058
Present Frequency of Service Attendance	.083786	4.656	.0000
Frequency of Service Attendance at age 11-12	.016824	1.128	.2593
Present Frequency of Praying	.005065	.259	.7956
Present Frequency of Church Activities Attendance	.010547	.844	.3986
Age	.077893	7.205	.0000
Sex (female=1 - male=2)	-.019819	-1.893	.0584
College Education (binary variable)	.037785	3.623	.0003
			Sig F
adjusted R-square= .04737			.0000

Table A13: Attitudes towards Welfare Cheating

Dependent Variable: Attitudes towards Welfare Cheating  4 levels. "seriously wrong" = 1;  "Not wrong" = 4	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	-.036651	-3.349	.0008
Percentage without denomination	.035245	2.612	.0090
Percentage of Protestants	.089886	5.857	.0000
Respondent is Catholic (binary variable)	-.039410	-2.052	.0402
Respondent is Protestant (binary variable)	-.002350	-.145	.8849
BELIEF	-.0005965	-.003	.9976
CLOSENESS	.052448	2.593	.0095
Present Frequency of Service Attendance	-.030698	-1.697	.0897
Frequency of Service Attendance at age 11-12	.016863	1.124	.2609
Present Frequency of Praying	.015223	.776	.4377
Present Frequency of Church Activities Attendance	-.011279	-.898	.3690
Age	.065123	6.006	.0000
Sex (female=1 - male=2)	-.001440	-.137	.8911
College Education (binary variable)	.054593	5.219	.0000
			Sig F
adjusted R-square= .02313			.0000

Table A14: RELIGIOUS MIRACLES (binary variable):  
Respondent believes/does not believe in ...

Dependent Variable: RELIGIOUS MIRACLES (binary variable)	R	Sig
Independent Variables:		
West/East (West=1 - East=2)	-.0345	.0000
Percentage without denomination	.0000	.5713
Percentage of Protestants	-.0188	.0081
Respondent is Catholic (binary variable)	.0132	.0345
Respondent is Protestant (binary variable)	.0000	.6591
BELIEF	.1341	.0000
CLOSENESS	.1133	.0000
Age	-.0392	.0000
Sex (female=1 - male=2)	-.0210	.0041
College Education (binary variable)	-.0209	.0042
Model Chi-Square = 2732.997		.0000

Table A15: FAITH HEALERS (binary variable):  
Respondent believes/does not believe in ...

Dependent Variable: FAITH HEALERS (binary variable)	R	Sig
Independent Variables:		
West/East (West=1 - East=2)	.0999	.0000
Percentage without denomination	-.0583	.0000
Percentage of Protestants	-.1019	.0000
Respondent is Catholic (binary variable)	.0000	.4225
Respondent is Protestant (binary variable)	.0039	.1463
BELIEF	.0153	.0537
CLOSENESS	.0623	.0000
Age	-.0506	.0000
Sex (female=1 - male=2)	-.0587	.0000
College Education (binary variable)	.0000	.6067
Model Chi-Square = 6756.100		.0000



Table A16: GOOD LUCK CHARMS (binary variable):  
Respondent believes/does not believe in ...

Dependent Variable: GOOD LUCK CHARMS (binary variable)	R	Sig
Independent Variables:		
West/East (West=1 - East=2)	.0503	.0000
Percentage without denomination	.0000	.9093
Percentage of Protestants	.0000	.9849
Respondent is Catholic (binary variable)	.0000	.8993
Respondent is Protestant (binary variable)	.0237	.0173
BELIEF	.0000	.7369
CLOSENESS	.0318	.0033
Age	-.1341	.0000
Sex (female=1 - male=2)	-.0394	.0004
College Education (binary variable)	-.0503	.0000
Model Chi-Square = 193.051		.0000

Table A17: FORUNE TELLERS (binary variable):  
Respondent believes/does not believe in ...

Dependent Variable: FORUNE TELLERS (binary variable)	R	Sig
Independent Variables:		
West/East (West=1 - East=2)	.2133	.0000
Percentage without denomination	-.1644	.0000
Percentage of Protestants	.0232	.0173
Respondent is Catholic (binary variable)	-.0121	.0838
Respondent is Protestant (binary variable)	.0000	.4571
BELIEF	.0000	.7807
CLOSENESS	.0547	.0000
Age	-.1244	.0000
Sex (female=1 - male=2)	-.0887	.0000
College Education (binary variable)	-.0239	.0154
Model Chi-Square = 621.735		.0000

Table A18: HOROSCOPE (binary variable):  
Respondent believes/does not believe in ...

Dependent Variable:  HOROSCOPE  (binary variable)	R	Sig
Independent Variables:		
West/East (West=1 - East=2)	.1025	.0000
Percentage without denomination	-.0931	.0000
Percentage of Protestants	.0000	.3084
Respondent is Catholic (binary variable)	.0000	.8750
Respondent is Protestant (binary variable)	.0302	.0049
BELIEF	.0000	.3471
CLOSENESS	.0416	.0003
Age	-.0245	.0152
Sex (female=1 - male=2)	-.0779	.0000
College Education (binary variable)	.0000	.703
Model Chi-Square = 6289.380		.0000

Table A19: GAIN (binary variable): Respondent believes, but did not believe formerly

Dependent Variable: GAIN (binary variable)	R	Sig
Independent Variables:		
West/East (West=1 - East=2)	-.0338	.0061
Percentage without denomination	.0000	.6951
Percentage of Protestants	.0000	.2289
Respondent is Catholic (binary variable)	.0000	.4779
Respondent is Protestant (binary variable)	.0688	.0000
Age	-.0331	.0069
Sex (female=1 - male=2)	.0726	.0000
College Education (binary variable)	.0000	.9147
Model Chi-Square = 81.708		.0000

Table A20: LOSS (binary variable): Respondent does not believe. but used to

Dependent Variable: LOSS (binary variable)	R	Sig T
Independent Variables:		
West/East (West=1 - East=2)	.0000	.8417
Percentage without denomination	.0645	.0000
Percentage of Protestants	.0417	.0000
Respondent is Catholic (binary variable)	-.0742	.0000
Respondent is Protestant (binary variable)	-.0519	.0000
Age	.0000	.1686
Sex (female=1 - male=2)	.0411	.0000
College Education (binary variable)	.0394	.0000
Model Chi-Square = 377.988		.0000

Table A21: TREND in Religious Biography: Respondent presently goes to church less frequently. about as frequently. or more frequently than at age 11-12:

Dependent Variable: TREND in Religious Biography: Respondent presently goes to church less frequently. about as frequently. or more frequently than at age 11-12:  3 levels: 1="less frequently"; 2="about as frequently"; 3="more frequently"	Beta	T	Sig T
Independent Variables:			
West/East (West=1 - East=2)	.011408	1.169	.2424
Percentage without denomination	-.070946	-5.847	.0000
Percentage of Protestants	-.092626	-6.934	.0000
Respondent is Catholic (binary variable)	.171104	10.935	.0000
Respondent is Protestant (binary variable)	.086786	6.273	.0000
Age	.042011	4.449	.0000
Sex (female=1 - male=2)	-.048050	-5.144	.0000
College Education (binary variable)	.011983	1.270	.2041
adjusted R-square= .0555			Sig F .0000